

Patent Application US/07/715,272A

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Carter, Paul J.
Presta, Leonard G.

(ii) TITLE OF INVENTION: Immunoglobulin Variants

(iii) NUMBER OF SEQUENCES: 10

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Genentech, Inc.
(B) STREET: 460 Point San Bruno Blvd
(C) CITY: South San Francisco
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 94080

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: patin (Genentech)

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 07/715,272
(B) FILING DATE: 14-June-1991
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Adler, Carolyn R.
(B) REGISTRATION NUMBER: 32,324
(C) REFERENCE/DOCKET NUMBER: 709

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 415/266-2614
(B) TELEFAX: 415/952-9881
(C) TELEX: 910/371-7168

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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54  Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
55      1              5              10              15
56
57  Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Asn
58              20              25              30
59
60  Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
61              35              40              45
62
63  Leu Leu Ile Tyr Ser Ala Ser Phe Leu Glu Ser Gly Val Pro Ser
64              50              55              60
65
66  Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile
67              65              70              75
68
69  Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
70              80              85              90
71
72  His Tyr Thr Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu
73              95              100             105
74
75  Ile Lys Arg Thr
76      109
77
78  (2) INFORMATION FOR SEQ ID NO:2:
79
80      (i) SEQUENCE CHARACTERISTICS:
81          (A) LENGTH: 120 amino acids
82          (B) TYPE: amino acid
83          (D) TOPOLOGY: linear
84
85      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
86
87  Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
88      1              5              10              15
89
90  Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys
91              20              25              30
92
93  Asp Thr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
94              35              40              45
95
96  Glu Trp Val Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr
97              50              55              60
98
99  Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser
100              65              70              75
101
102  Lys Asn Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
103              80              85              90
104
105  Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr
106              95              100             105

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107
108 Ala Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
109 110 115 120
110
111

112 (2) INFORMATION FOR SEQ ID NO:3:

113 (i) SEQUENCE CHARACTERISTICS:

114 (A) LENGTH: 109 amino acids

115 (B) TYPE: amino acid

116 (D) TOPOLOGY: linear

117 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

118
119
120
121 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
122 1 5 10 15
123
124 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Ser
125 20 25 30
126
127 Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
128 35 40 45
129
130 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
131 50 55 60
132
133 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
134 65 70 75
135
136 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
137 80 85 90
138
139 Tyr Asn Ser Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu
140 95 100 105
141
142 Ile Lys Arg Thr
143 109
144

145 (2) INFORMATION FOR SEQ ID NO:4:

146 (i) SEQUENCE CHARACTERISTICS:

147 (A) LENGTH: 120 amino acids

148 (B) TYPE: amino acid

149 (D) TOPOLOGY: linear

150 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

151
152
153
154 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
155 1 5 10 15
156
157 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
158 20 25 30
159

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160 Asp Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
161 35 40 45
162
163 Glu Trp Val Ala Val Ile Ser Glu Asn Gly Gly Tyr Thr Arg Tyr
164 50 55 60
165
166 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser
167 65 70 75
168
169 Lys Asn Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
170 80 85 90
171
172 Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr
173 95 100 105
174
175 Ala Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
176 110 115 120
177
178

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

188 Asp Ile Val Met Thr Gln Ser His Lys Phe Met Ser Thr Ser Val
189 1 5 10 15
190
191 Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Asn
192 20 25 30
193
194 Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly His Ser Pro Lys
195 35 40 45
196
197 Leu Leu Ile Tyr Ser Ala Ser Phe Arg Tyr Thr Gly Val Pro Asp
198 50 55 60
199
200 Arg Phe Thr Gly Asn Arg Ser Gly Thr Asp Phe Thr Phe Thr Ile
201 65 70 75
202
203 Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
204 80 85 90
205
206 His Tyr Thr Thr Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu
207 95 100 105
208
209 Ile Lys Arg Ala
210 109
211

(2) INFORMATION FOR SEQ ID NO:6:

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213

214 (i) SEQUENCE CHARACTERISTICS:

215 (A) LENGTH: 120 amino acids

216 (B) TYPE: amino acid

217 (D) TOPOLOGY: linear

218

219 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

220

221 Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly

222 1 5 10 15

223

224 Ala Ser Leu Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys

225 20 25 30

226

227 Asp Thr Tyr Ile His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu

228 35 40 45

229

230 Glu Trp Ile Gly Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr

231 50 55 60

232

233 Asp Pro Lys Phe Gln Asp Lys Ala Thr Ile Thr Ala Asp Thr Ser

234 65 70 75

235

236 Ser Asn Thr Ala Tyr Leu Gln Val Ser Arg Leu Thr Ser Glu Asp

237 80 85 90

238

239 Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr

240 95 100 105

241

242 Ala Met Asp Tyr Trp Gly Gln Gly Ala Ser Val Thr Val Ser Ser

243 110 115 120

244

245

246 (2) INFORMATION FOR SEQ ID NO:7:

247

248 (i) SEQUENCE CHARACTERISTICS:

249 (A) LENGTH: 27 bases

250 (B) TYPE: nucleic acid

251 (C) STRANDEDNESS: single

252 (D) TOPOLOGY: linear

253

254 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

255

256

257 TCCGATATCC AGCTGACCCA GTCTCCA 27

258

259

260

261 (2) INFORMATION FOR SEQ ID NO:8:

262

263 (i) SEQUENCE CHARACTERISTICS:

264 (A) LENGTH: 31 bases

265 (B) TYPE: nucleic acid

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266 (C) STRANDEDNESS: single
267 (D) TOPOLOGY: linear
268
269 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
270
271
272 GTTTGATCTC CAGCTTGGTA CCHSCDCCGA A 31
273
274
275
276 (2) INFORMATION FOR SEQ ID NO:9:
277
278 (i) SEQUENCE CHARACTERISTICS:
279 (A) LENGTH: 22 bases
280 (B) TYPE: nucleic acid
281 (C) STRANDEDNESS: single
282 (D) TOPOLOGY: linear
283
284 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
285
286
287 AGGTSMARCT GCAGSAGTCW GG 22
288
289
290
291 (2) INFORMATION FOR SEQ ID NO:10:
292
293 (i) SEQUENCE CHARACTERISTICS:
294 (A) LENGTH: 34 bases
295 (B) TYPE: nucleic acid
296 (C) STRANDEDNESS: single
297 (D) TOPOLOGY: linear
298
299 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
300
301
302 TGAGGAGACG GTGACCGTGG TCCCTTGGCC CCAG 34
303
304

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/07/715,272A

DATE: 07/19/91
TIME: 16:16:36

LINE ERROR

ORIGINAL TEXT

27 Wrong application Serial Number

OK (A) APPLICATION NUMBER: 07/715,272

SEQUENCE MISSING ITEM REPORT
PATENT APPLICATION US/07/715,272A

DATE: 07/19/91
TIME: 16:16:36

MANDATORY IDENTIFIER THAT WAS NOT FOUND

PAGE: 1

SEQUENCE CORRECTION REPORT
PATENT APPLICATION US/07/715,272A

DATE: 07/19/91
TIME: 16:16:36

LINE ORIGINAL TEXT

CORRECTED TEXT